Telephone Interview Agenda
Application: 10/717,941

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Differences between the present invention and the cited prior art
Talati (2004/0044997) teaches downloading new code to a shadow area and then copying the new code over old code in a runtime area.

Rocray (WO 02/13003) teaches loading software in a multiprocessor system, resolving compatibility issues between components. Software Generic Control (SGC) file includes information relating to the compatibility of software components with processor modules. Rocray, page 2, lines 14-17. SGC includes type, version, configuration version. Rocray, fig. 2A, ref. 44. Each component has a configuration data file storing a minimum configuration version. Rocray, page 8, lines 15-16. The minimum configuration version is compared with a product level version for a software release, and the minimum value must be smaller or equal to the product level version. Rocray, page 8, lines 18-20. Size and checksum are used for error detection. Rocray, page 11, line 9. New versions of software are downloaded to a backup bank of a non-volatile storage and then the new software switched to by switching to the backup bank. Rocray, page 19, lines 1-5.

The present invention loads a new code image to a temporary memory location, identifies and reconciles incompatibilities between old code and new code, and loads the new code image. The present invention is distinguished in identifying incompatibilities from initialization differences and size and location differences, and in reconciling incompatibilities by changing an initialization order and converting data structure formats.

Proposed Amendment

1.   An apparatus for updating a code image, comprising:

a loader configured to load a new code image into a temporary memory location separate

from a memory space occupied by and used by an old code image;

a logic module configured to identify incompatibilities between the old code image and

the new code image from version information, a difference in initialization requirements, and a

difference in size and location between the old code image and the new code image;

a bootstrap module, within the new code image, configured to reconcile the

incompatibilities by changing an initialization order and converting at least one data structure to

a format compatible with the new code image; and

a copy module configured to copy the new code image into the memory space occupied

by the old code image, wherein the loader, logic module, boot strap module, and copy module

comprise executable code stored on a storage device and executed by a processor.